

REMARKS/ARGUMENTS

The term “vinyl chloride” has been removed from Claim 1, thus removing from the scope of the claims homopolymers of vinyl chloride as possible synthetic resins. Claim 9 has been corrected to provide an introduction, and Claim 20 has been rewritten as Claims 21 and 22. See Claim 20 and, e.g., specification page 17, lines 21-24 for support. New Claims 23 and 24 find support at specification page 6, lines 21-28. No new matter has been entered.

The rejection over Artur is traversed.

Artur is limited to rigid polyvinylchloride resins, reinforced with impact strength enhancing amounts of a particular calcium carbonate filler. As described in his Abstract, Artur's compositions are intended for the fabrication of strong, useful shaped articles.

On the other hand, the present invention relates to compositions that provide improved barrier properties, but which remain flexible, and therefore are useful in the production of films. As described at the top of specification page 2, the present invention films have good thermal resistance and good oxygen-barrier properties, two properties very important for the production of superior films intended, for example, for food packaging.

The several Examples of the invention films in the specification bear out the fact that both good thermal stability and low oxygen permeability is provided by the invention composition, when films are formed therefrom. In particular, Table 1 at specification page 20:

Table 1

Example	1	2	3	4	5	6	7
Resin (%)	100	100	100	100	100	100	100
ESO (%)		2	2	2	1		
PCC (%)			1	1	1	2	2
Film appearance	(c)	(a)	(a)	(b)	-	-	(a)
TS (min)	-	11	26	18	24	30	>20
O ₂ permeability (cm ³ .10μm/m ² /	10	7.8	7.6	9.5	-	-	4.4

day/bar)							
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shows the differences obtained between Examples 1 and 2 (not according to the invention) as compared with inventive Examples 3-7. Note, especially, the superior increase in thermal stability (TS) combined with the consistent or improved oxygen permeability and film appearance. Further benefits of the invention are shown in Table 2 of the specification:

Table 2

Example	8	9	10	11	12
IE (%)	-	56	54	70	56
DOP porosity	15	41	40.5	-	-
FFD	0.65	0.56	0.63	0.49	0.58
>850 $\mu\text{m/g}$	116	62	74	147	86
850-500 $\mu\text{m/g}$	219	93	84	109	71
500-250 $\mu\text{m/g}$	259	104	98	116	83
250-104 $\mu\text{m/g}$	204	147	218	560	218
104-45 $\mu\text{m/g}$	114	377	358	4	481
<45 $\mu\text{m/g}$	88	217	168	64	61
d_m (μm)	450	250	270	430	278
d_{50} (μm)	240	55	70	140	70
η	3	9	7	6	8
TS (min)	7	13	15	14	15
O ₂ permeability ($\text{cm}^3 \cdot \mu\text{m/m}^2 \cdot \text{d} \cdot \text{atm}$)	950	785	830	1010	790

demonstrating superior benefits for the present invention with regard to particle size distribution (note the paragraphs bridging specification pages 18-19), thermal stability and oxygen permeability (Examples 9-12) as compared with an Example outside the presently claimed scope (Example 8).

Because Artur is limited to matrices reinforced with impact strength enhancing amounts of filler and shaped articles made therefrom, and moreover discloses only the use of

one particular type of filler and PVC, this disclosure cannot be said to either anticipate or render obvious the presently claimed invention, or to suggest or disclose the benefits flowing therefrom particularly when the present invention is in the form of a film (see, e.g., claims 21 and 22).

Accordingly, Applicants respectfully request the reconsideration and withdrawal of the outstanding rejection, and the passage of this case to Issue.

Respectfully submitted,

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